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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,324	06/06/2001	Scott D. Guthrie	40062.98US01/MS160314.1	7515
27488	7590	07/12/2006		
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EXAMINER				
LESNIEWSKI, VICTOR D				
ART UNIT		PAPER NUMBER		
2152				

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/875,324	Applicant(s) GUTHRIE ET AL.	
	Examiner Victor Lesniewski	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41-58 is/are rejected.
- 7) ☒ Claim(s) 42 and 51 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 4/10/2006 has been placed of record in the file.
2. Claims 41 and 50 have been amended.
3. Claims 41-58 are now pending.
4. The applicant's arguments with respect to claims 41-58 have been considered but are moot in view of the following new grounds of rejection.

Response to Amendment

5. Claims have been amended to show the schema as separate from the object and the providing of the schema to a client process. The amendment proves a change in scope to the independent claims as the independent claims now explicitly state the data exchange schema data being a separate description from the data processing object and providing the data exchange schema data to a subsequent client process. However, none of the amended claims show a patentable distinction over the prior art as evidenced by the following new grounds of rejection.

Claim Objections

6. Claims 42 and 51 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. The applicant is required to cancel the claims, amend the claims to place them in proper dependent form, or rewrite the claims in independent form.
7. Claims 42 and 51 recite limitations already included in the claim from which they depend.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 41-47, 49-56, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig et al. (U.S. Patent Number 6,757,708), hereinafter referred to as Craig, in view of W3C's "Metadata Activity Statement," dated 5/8/2000, hereinafter referred to as W3C.

10. Craig disclosed a method for providing dynamically generated content wherein the interim results of dynamic generation computations (such as a generated bean instance or object) are cached. In an analogous art, W3C disclosed a description of the Resource Description Framework which can provide a flexible metadata framework for systems that utilize dynamically generated content.

11. Concerning claims 41 and 50, Craig did not explicitly state the data exchange schema data being a separate description from the data processing object or determining format and function from the data exchange schema data. However, W3C does explicitly disclose these features as it uses the Resource Description Framework (RDF) as a separate description that allows for determining format and function of values of objects. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Craig by adding the ability for the data exchange schema data to be a separate description from the data processing object and to determine format and function from the data exchange schema

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data as provided by W3C. Here the combination satisfies the need for a flexible framework that improves the use of metadata on the web in such a way that allows content to be properly searched and processed by computer. See W3C, page 1, Introduction. This rationale also applies to those dependent claims utilizing the same combination.

12. Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a computer program data product are rejected under the same rationale applied to the described claim.

13. Thereby, the combination of Craig and W3C discloses:

- <Claims 41 and 50>

A method for automatically creating data exchange schema data on a network server corresponding to remote processing services provided by the network server for source code corresponding to data processing objects used to provide the remote processing services upon receipt of a request from a client process, the method comprising: storing a source code file within the mass storage of the server (Craig, column 12, lines 1-9); compiling the source code file to generate a data processing object, the data processing object providing the requested processing service (Craig, column 12, lines 1-18); automatically generating the data exchange schema data that specifies how to exchange data between the server and the client process for the data processing object, the data exchange schema data generated when the source code file is compiled to generate the data processing object, the data exchange schema data being a separate description from the data processing object (Craig, column 10, lines 57-65 and W3C, page 3, paragraphs 1-2); storing the data exchange schema data within the web services library for use by

subsequent processing service requests (Craig, figure 4, items 430 and 475); and providing the data exchange schema data to a subsequent client process, the subsequent client process determining format and function of input and output arguments of the data processing object from the data exchange schema data (Craig, column 8, line 59 through column 9, line 4 and W3C, page 3, paragraph 3).

- <Claims 42 and 51>

The method according to claim 41, wherein the method further comprises storing the data exchange schema data within the web services library for use by subsequent processing service requests (Craig, figure 4, items 430 and 475).

- <Claims 43 and 52>

The method according to claim 42, wherein data exchange schema data comprises an HTML representation for a web page containing a description of exposed data processing services (Craig, column 10, lines 55-60).

- <Claims 44 and 53>

The method according to claim 43, wherein the web page comprises: a textual description of each exposed data processing service based upon data stored within the source code file (Craig, column 10, lines 55-65); a description of each input argument accepted by each exposed data processing service, the description includes a description of the input argument and a description of the data format for the input argument data expected by the exposed data processing service (Craig, column 10, lines 5-15 and W3C, page 3, paragraph 3); and a description of each output data value generated by each exposed data processing service (Craig, column 9, lines 25-40 and W3C, page 3, paragraph 3).

- <Claims 45 and 54>

The method according to claim 44, wherein the description of each input argument further comprises an input field upon the generated web page for permitting a user to input a value to be passed to the exposed data processing service as the corresponding input argument (Craig, column 9, lines 20-40 and column 5, lines 5-25).

- <Claims 46 and 55>

The method according to claim 45, wherein the description of each output data value generated by each exposed data processing service further comprises an activate button which causes the remote data processing service to be activated using the values contained within the input fields corresponding to the input arguments as the input arguments submitted with the remote data processing service request (Craig, column 9, lines 20-55 and column 5, lines 5-25).

- <Claims 47 and 56>

The method according to claim 42, wherein the data exchange schema data comprises a specification for the input and output data schema expressed in a data transfer specification language (W3C, page 3, paragraphs 1-2).

- <Claims 49 and 58>

The method according to claim 47, wherein the data transfer specification language comprises a Resource Description Format representation for the data exchange schema data (W3C, page 3, paragraphs 1-2).

Since the combination of Craig and W3C discloses all of the above limitations, claims 41-47, 49-56, and 58 are rejected.

14. Claims 48 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig in view of W3C, as applied above, further in view of W3C's "Web Services Description Language (WSDL) 1.1," dated 3/15/2001, cited in a previous action as Curbera, but hereinafter referred to as WSDL.

15. The combination of Craig and W3C disclosed a method for providing dynamically generated content wherein the interim results of dynamic generation computations (such as a generated bean instance or object) are cached, which utilizes a flexible description language for handling the generated content. In an analogous art, WSDL disclosed another type of flexible description language, Web Services Description Language, for describing network services.

16. Concerning claims 48 and 57, the combination of Craig and W3C did not explicitly state the data transfer specification language comprising a Web Services Description Language representation. However, WSDL (also a W3C document) does explicitly disclose the use of Web Services Description Language in a system such as Craig's and W3C's for describing network services. Web Services Description Language would have been a clear alternative for a description language for one of ordinary skill in the art in this type of system. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Craig and W3C by adding the ability for the data transfer specification language to comprise a Web Services Description Language representation as provided by WSDL. Here the combination satisfies the need for the description of endpoints and their messages regardless of what message formats or network protocols are used to communicate. See WSDL, page 1, Abstract.

17. Thereby, the combination of Craig, W3C, and WSDL discloses:

- <Claims 48 and 57>

The method according to claim 47, wherein the data transfer specification language comprises a Web Services Description Language representation for the data exchange schema data (WSDL, page 1, Abstract).

Since the combination of Craig, W3C, and WSDL discloses all of the above limitations, claims 48 and 57 are rejected.

Conclusion

18. The applicant's amendment necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). The applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number is 571-272-3987.

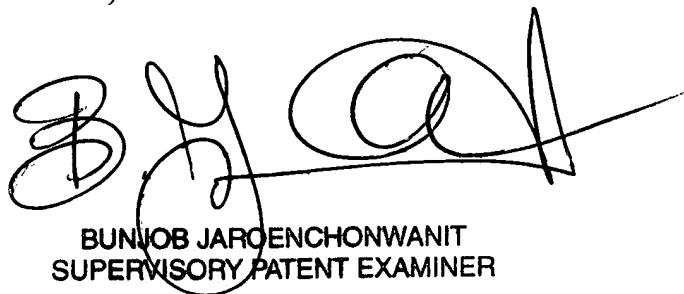
The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Victor Lesniewski
Patent Examiner
Group Art Unit 2152



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SUPERVISORY PATENT EXAMINER